

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK**

SIGNIFY NORTH AMERICA CORPORATION
and SIGNIFY HOLDING B.V.

Plaintiffs,

v.

SATCO PRODUCTS, INC.

Defendant.

Civil Action No. 2:19-cv-06125-JMA-SIL

JURY TRIAL DEMANDED

**SIGNIFY NORTH AMERICA CORPORATION AND
SIGNIFY HOLDING B.V.'S
REPLY CLAIM CONSTRUCTION BRIEF**

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1	U.S. Patent No. 7,352,138
2	U.S. Patent No. 7,038,399
3	U.S. Patent No. 7,256,554
4	U.S. Patent No. 6,972,525
5	U.S. Patent No. 8,070,328
6	U.S. Patent No. 7,348,604
7	U.S. Patent No. 7,358,929
8	Declaration of Michael Gershowitz
9	Declaration of Regan Zane, Ph.D.
10	William R. Blood, <i>MECL System Design Handbook</i> (4th ed. 1988)
11	Illustrated Dictionary of Elec. 145 (Stan Gibilisco ed., 8th ed. 2001)
12	McGraw Hill Dictionary of Sci. and Tech. Terms 159, 453, 1560 (Sybil P. Parker ed., 5th ed. 1994)
13	Wiley Elec. and Elec. Eng'g. Dictionary 145 (Steven M. Kaplan lexicographer, 1st ed. 2004)
14	John D. Bullough, <i>Why is heat sinking important for LEDs?</i> , 7 Lighting Answers: LED Lighting Systems 11 (2003)
15	Raghav Mahalingam, <i>Air Cooling for LED Lighting</i> , in <i>Thermal Management for LED Applications</i> (2014)
16	Mehmet Arik et al., <i>Thermal Management of LEDs: Package to System</i> , 5187 Proc. of SPIE 64 (2004)
17	Stephen L. Buchwalter et al., <i>Cleavable Epoxy Resins: Design for Disassembly of a Thermoset</i> , 34 J. of Polymer Sci.: Part A: Polymer Chemistry 249-260 (1996)
18	<i>Flyback Converter</i> , Wikipedia, https://en.wikipedia.org/wiki/Flyback_converter (last visited Nov. 20, 2020)
19	<i>Buck Converter</i> , Wikipedia, https://en.wikipedia.org/wiki/Buck_converter (last visited Nov. 20, 2020)
20	Transcript of the deposition of Dr. John Curran dated December 29, 2021 ("Curran Tr.")
21	Transcript of the deposition of Dr. Peter Shackle dated December 30, 2021 ("Shackle Tr.")
22	Declaration of Peter Shackle, Ph.D. in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent No. 7,038,399, Case IPR2018-00790, dated March 19, 2018
23	U.S. Pub. No. 2003/0058650 ("Shih '650")
24	'604 Patent Prosecution History, Oct. 31, 2007 Notice of Allowance
25	U.S. 5,682,306 ("the '306 Patent")

¹ Exhibit numbering continues from the exhibits attached to Signify's Opening Claim Construction Brief.

Exhibit	Reference
26	'525 Patent Prosecution History, Applicant's Amendment and Arguments of June 30, 2005
27	U.S. 5,736,881 ("Ortiz")
28	Expert Report of Peter W. Shackle, Ph.D. Regarding Invalidity, <i>In the Matter of Certain LED Lighting Devices, LED Power Supplies, and Components Thereof</i> , Inv. No. 337-TA-1081 (U.S.I.T.C.), SATCO-SIG-000148980-000149410
29	File-stamped declaration of Dr. John W. Curran, submitted in <i>Cao Lighting, Inc. v. Light Efficient Design</i> , Case No. 1:17-CV-07359 (N.D. Ill.)

GLOSSARY

Term	Definition
Signify or Plaintiff	Plaintiffs Signify North America Corporation and Signify Holding B.V.
Satco or Defendant	Defendant Satco Products, Inc.
'138 Patent	U.S. Patent No. 7,352,138
'399 Patent	U.S. Patent No. 7,038,399
'554 Patent	U.S. Patent No. 7,256,554
'525 Patent	U.S. Patent No. 6,972,525
'328 Patent	U.S. Patent No. 8,070,328
'604 Patent	U.S. Patent No. 7,348,604
'929 Patent	U.S. Patent No. 7,358,929
The Patents-in-Suit	U.S. Patent No. 7,352,138; U.S. Patent No. 7,038,399; U.S. Patent No. 7,256,554; U.S. Patent No. 6,972,525; U.S. Patent No. 8,070,328; U.S. Patent No. 7,348,604; U.S. Patent No. 7,358,929
POSITA	Person of ordinary skill in the art
Op. br.	Signify North America Corporation and Signify Holding B.V.'s Opening Claim Construction Brief, Dkt. No. 109
Resp. br.	Satco's Responsive Claim Construction Brief, Dkt. No. 116
Ortiz	U.S. 5,736,881

I. INTRODUCTION

Satco's unsupported constructions and improper indefiniteness arguments should be rejected. Signify thus respectfully requests that the Court adopt its proposed constructions and details the deficiencies in Satco's claim constructions below.

II. THE '328 PATENT

A. "heatsink / heat sink"

Satco's response makes plain that the terms "heatsink" and "heat sink" require no construction and should be given their plain and ordinary meaning. Indeed, Satco and its expert admit that "'heat sink' is a term of art whose meaning is well-understood by a POSITA." Resp. br. at 4; Ex. 20, 62:7-11. Even Satco's own expert, in past litigations, has not found it necessary to define the term heat sink because it is a term that a POSITA readily understands. *See* Ex. 20, 102:24-104-7; Ex. 29. The term thus needs no construction. *See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008). This is especially true given that nothing in the intrinsic record evidences an intent to deviate from the plain meaning. *ActiveVideo Networks, Inc. v. Verizon Commc'ns., Inc.*, 694 F.3d 1312, 1326 (Fed. Cir. 2012) (rejecting argument that term must be construed and stating that "[t]he district court did not err in concluding that these terms have plain meanings that do not require additional construction. [Plaintiff's] proposed construction erroneously reads limitations into the claims and the district court properly rejected that construction and resolved the dispute between the parties.").

In violation of basic claim construction principles, Satco improperly imports limitations into the claim. Satco first tries to limit the heat sink to a "heat conductive device." However, nothing in the intrinsic record limits the heat sink to any specific material or device. Satco cites to a single paragraph and embodiment in the specification for support. Resp. br. at 5. However, "[i]t is well established that claims are not limited to preferred embodiments, unless the specification

clearly indicates otherwise.” *WesternGeco LLC v. ION Geophysical Corp.*, 889 F.3d 1308, 1323-24 (Fed. Cir. 2018). There is no such limiting language in the specification. Satco’s argument that Signify’s construction is too broad because the heat sink could include a person’s hand is plainly ridiculous. In the context of the claims—which are LED downlights—a POSITA would never include a person’s hand as a “light” component.

Further, Satco’s inclusion of the language “heat-conductive device” does not provide any clarity since, as Satco’s expert admits, it would only lead to further disputes about what a “heat-conductive device” is. *See* Ex. 20, 46:12-13, 51:17-52:1 (admitting that he was “not sure how to answer” when a device would not be considered heat conductive). Such constructions are improper. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (noting that one of the purposes of claim construction is “to *clarify* and when necessary to explain what the patentee covered by the claims”) (emphasis added).

The rest of Satco’s argument relies *exclusively* on extrinsic evidence. *See* Resp. br. at 5-7. However, Satco’s heavy reliance on extrinsic evidence is misplaced. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1319 (Fed. Cir. 2005).

The same flaws exist with Satco’s complaint that “Signify’s construction does not specify the sole purpose of the heat sink.” Resp. br. at 6. Satco’s construction adds language that the heat sink “dissipates unwanted heat and reduces heat in the LED downlight fixture.” However, nothing in the intrinsic record so-limits a heat sink, rendering its inclusion improper. *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1367 (Fed. Cir. 2001) (“Where the function is not recited in the claim itself by the patentee, we do not import such a limitation.”); *see also* Ex. 20, 58:5-22 (stating that there is “no description” in the ’328 Patent regarding the function of a heatsink). Thus, because the term is admittedly well-known to a POSITA, and Satco has shown no evidence that the

patentees redefined this term, “heat sink” and “heatsink” require no construction.

B. “preselected spaced distance”

“Preselected spaced distance” should also be given its plain and ordinary meaning. Satco argues that without construction the term would be “ambiguous” and that Signify’s construction would render the term “superfluous.” *See* Resp. br. at 7. If anything, Satco’s proposed construction—not Signify’s—adds ambiguity; Satco’s expert admitted that the phrase “optimal light cut-off” from Satco’s proposed construction is entirely subjective and its interpretation may vary from one person to the next. Ex. 20, 110:15-111:15.

Additionally, courts have routinely held that this phrase would be easily understood by a POSITA and requires no construction. *See Lamoureux v. AnazaoHealth Corp.*, 669 F. Supp. 2d 227, 251-52 (D. Conn. 2009) (“The Court has reviewed countless number of patent cases involving the phrase ‘predetermined distance,’ and in the vast majority of cases, no construction of this phrase was even required.”). For the diffuser to be positioned a “preselected spaced distance,” the distance must simply be chosen in advance and comport with the rest of the requirements of the claim. *See IGT v. Bally Gaming Int’l, Inc.*, 659 F.3d 1109, 1118 (Fed. Cir. 2011) (holding that district court correctly construed “predetermined event” to mean “chosen in advance” and rejecting defendant’s argument that this read predetermined out of the claim). Satco’s contention that its construction is necessary to “eliminate ambiguity” and “provide the phrase with meaning” is simply wrong; any lay person can understand the phrase “preselected spaced distance.”

C. “one of above a lowermost edge reflector or beneath said lowermost edge of said reflector”

The term “one of above a lowermost edge reflector or beneath said lowermost edge of said reflector” has a definite meaning. Satco argues that a POSITA would not understand what “lowermost edge reflector” means. Resp. br. at 9. However, read in the context of the rest of claim,

a POSITA would be left with no doubt as to what the claim was referring to. *See* Ex. 8 at ¶¶ 63-68; Ex. 20, 118:11-120:20. Thus, contrary to Satco’s assertion, Signify is not asking the Court to correct anything. The claim, as written, when read in light of the rest of the claim and specification, clearly informs a POSITA of the claimed invention with reasonable certainty.

Moreover, to the extent that the Court feels obliged to add language into the claim, this is not impermissible, unlike Satco claims. *See CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353, 1358 (Fed. Cir. 2011) (“It is well-settled law that, in a patent infringement suit, a district court may correct an obvious error in a patent claim.”); *Roche Diagnostics GmbH v. Enzo Biochem*, No. 04 Civ. 4046, 2017 U.S. Dist. LEXIS 229491, at *53-54 (S.D.N.Y. Oct. 2, 2017) (correcting claim language because the mistake was “a fairly minor clerical error” and viewed from the standpoint of a POSITA, was not subject to reasonable debate). Thus, even if the Court finds judicial correction necessary to render the claim not indefinite, it is clearly merited here.

III. THE ’399 AND ’138 PATENTS

A. “Controller”

“Controller” is not a means-plus-function term. The central dispute between the parties is whether the class of structures coming within the term “controller” is too broad.² Satco argues that the asserted claims’ requirement of a “controller” is broad enough to be analogous to a generic computer to implement an abstract idea, like that at issue in the *Alice* case regarding patent ineligibility. *See* Resp. br. at 27-28 (citing *Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. 208, 224, (2014)). Satco’s citation to abstract-idea case law is inapposite as that invalidity inquiry is a wholly separate question not at issue here; no party has suggested that the structures claimed in the ’399

² The parties appear to generally agree that a controller is a device that controls voltage or current. *See* Op. Br. at 16; resp. br. at 30; Shackle Decl. at ¶¶ 47, 52; Ex. L at 34:23-25.

and '138 Patents are invalid as abstract ideas. *Cf. Lifted Ltd., LLC v. Novelty Inc.*, No. 16-cv-03135, 2020 U.S. Dist. LEXIS 92102, at *4 (D. Colo. May 27, 2020) (“[C]laim construction is generally ‘not the proper avenue to pursue invalidity issues’”); *Spotless Enters., Inc. v. A&E Prods. Grp. L.P.*, 294 F. Supp. 2d 322, 344-45 (E.D.N.Y. 2003).³

The issue to be decided here is whether controller refers to a class of structures. The size of that class, however, is irrelevant because “breadth is not indefiniteness.” *See, e.g., BASF Corp. v. Johnson Matthey, Inc.*, 875 F.3d 1360, 1367 (Fed. Cir. 2017); *see also Skky, Inc. v. MindGeek, s.a.r.l.*, 859 F.3d 1014, 1019 (Fed. Cir. 2017) (“[I]t is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function”). “What is important is not simply that [the term] is defined in terms of what it does, but that the term, as the name for structure, has a reasonably well understood meaning in the art.” *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996).

A POSITA would have understood that the term “controller” refers to a structural component. First, the experts here agree that the term “controller” connotes a class of structures, including specific hardware like an LED driver, Ex. 21, 42:9-25, 82:6-17. Further, the specification confirms and narrows that class of structures through example components that might comprise the controller, such as “a rectifier,” “a low pass (*i.e.*, high frequency) filter,” a “DC converter,”

³ Regardless, the term “controller” is directed to specific circuitry to perform particular functions whereby it “matters . . . by what process or machinery the result is accomplished,” thus taking the claims outside the realm of patent-ineligible abstract ideas. *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1311-12 (Fed. Cir. 2016); *see also Id Image Sensing Llc v. Omnivision Techs.*, No. 20-136-RGA, 2020 U.S. Dist. LEXIS 220189, at *15 (D. Del. Nov. 24, 2020); Ex. 21, 199:13-18 (Satco’s expert, Dr. Shackle, agreeing that “using a controller for dimming as described [in the ’399 Patent] is an example of one **specific technical solution** to the problem of dimming an LED light based on an AC dimmer signal.”); resp. br. at 27 (Satco arguing that “abstract ideas are not patent-eligible unless they are tied to a **specific technical solution**.”).

and an “adjustment circuit.” It does not matter if that class of structures is large; all that matters is whether “controller” refers to a structure, and it clearly does. *See* Ex. 2 at 12:50-67, 14:8-18; Ex. 9 at ¶ 47; *see also* Ex. 21, 87:25-88:7 (Satco’s expert, Dr. Shackle, agreeing that “even though the power circuitry could be implemented with *hundreds* of different types of rectifiers, *hundreds* of different types of low-pass filters, and *hundreds* of different types of DC converters,” “claim 18 still provides sufficient structure” where it recites those components (emphasis added)); *id.* at 208:6-16, 219:6-23 (Dr. Shackle agreeing that, for a different patent, the term “LED power controller” would be understood by a POSITA as a structural term not subject to means-plus-function treatment); *id.*, 211:3-7, 212:4-9, 214:24-215:3 (Dr. Shackle agreeing that, in the context of a different patent, a POSITA would have known how to build an LED drive controller without any specific circuit-level instructions).

Because the parties agree that the term “controller” connotes structure to a POSITA, the term is not a means-plus-function term subject to § 112, ¶ 6. *See Skky, Inc.*, 859 F.3d at 1019; *Sound View Innovations, LLC v. Facebook, Inc.*, No. 16-cv-116, 2017 U.S. Dist. LEXIS 76412, at *11 (D. Del. May 19, 2017). The Court should construe the term according to its plain and ordinary meaning.

In the alternative, the appropriate structure for “controller” includes Figures 3, 5, and 7. If the Court determines that “controller” is a means-plus-function term, it should be accorded all of its disclosed structures in the specification, including the components illustrated in Figures 3, 5, and 7, as well as the exemplary embodiments of those components as shown in Figures 4, 6, 8, and 9, 10, or 11 as well as the accompanying descriptions in the specification and

structural equivalents thereof.⁴

The central dispute between the parties over corresponding structure is whether the block diagrams of Figures 3, 5, and 7 constitute sufficient structure to be linked to the claimed function for “controller.” Satco argues that those Figures are not specific enough.⁵ *See* Resp. br. at 32. But “[w]hile the specification must contain structure linked to claimed means, this is not a high bar: [a]ll one needs to do . . . is to recite some structure corresponding to the means in the specification, . . . , so that one can readily ascertain what the claim means.” *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007). Further, “[w]hen multiple embodiments in the specification correspond to the claimed function, proper application of § 112, [paragraph 6] generally reads the claim element to embrace *each* of those embodiments.” *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999) (emphasis added).

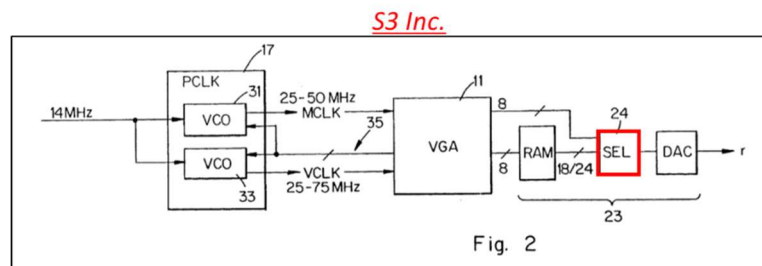
Satco argues that *Texas Digital* supports its argument that Figures 3 and 5 should not be included in the structure for “controller” because *Texas Digital* stated that a high-level diagram there “serve[d] merely as overview for introducing and explaining [another Figure, Fig. 4, and] the corresponding structures must necessarily be found in Fig. 4.” Resp. br. at 32. But Satco

⁴ As explained in Signify’s opening brief, Figure 3 is structure for the non-varying claims but not the dimmable claims, as Figure 3 does not include an adjustment circuit. Op. br. at 17-18. On the other hand, Figure 5 *is* appropriately linked to the function of the non-varying claims, contrary to Satco’s arguments. *See* Resp. br. at 31-32. The specification indicates that Figure 5 “includes an additional adjustment circuit 208 that further conditions a signal output from the DC converter 402.” Ex. 2, 14:11-14. But nothing in the specification indicates that the adjustment circuit 208 *must* further condition the signal output from the DC converter 402. Rather, the adjustment circuit may be unused, as in the non-varying claims. Only Signify’s proposal accords all disclosed structures to the term.

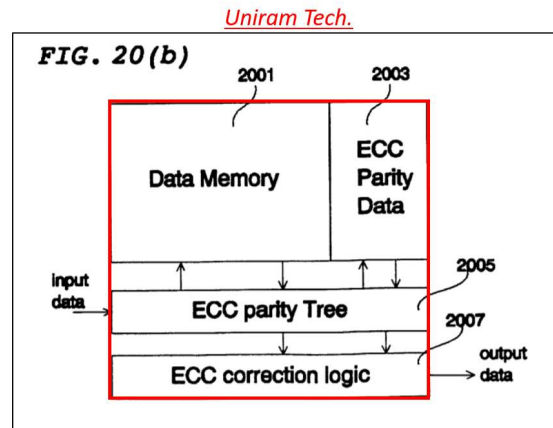
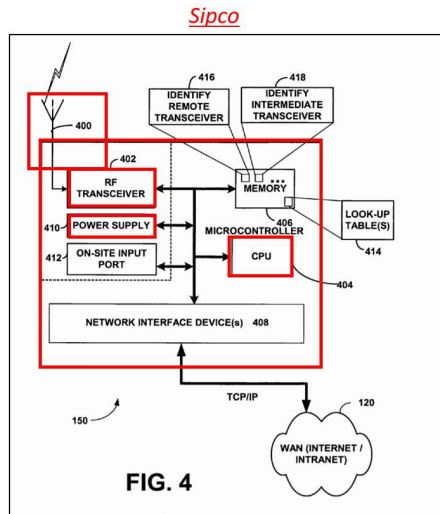
⁵ Satco is unclear as to whether it disagrees that the block diagram of Figure 7 constitutes sufficient structure for the claimed function for “controller.” Satco includes Figure 7 in the identified structure for the “dimming controller” claims identified in its Appendix 2, but Satco also argues in its brief that Figure 7 “is a block diagram that does not identify sufficient structure.” *See* Resp. br. at App. 2, 2-10; *id.* at 32. To the extent that Satco includes Figure 7 as appropriate structure but not Figures 3 and 5, Satco’s position is irreconcilably inconsistent.

mischaracterizes the holding of *Texas Digital*. In fact, *Texas Digital* held that “the district court’s identification of the corresponding structure was **incomplete**.” *Tex. Digit. Sys. v. Telegenix, Inc.*, 308 F.3d 1193, 1212 (Fed. Cir. 2002) (emphasis added). Further, not only did the corresponding structure **include the high-level diagram and Fig. 4** but also the structure “include[d . . .] the written description accompanying th[ese] Figures.” *Id.* (emphasis added).⁶

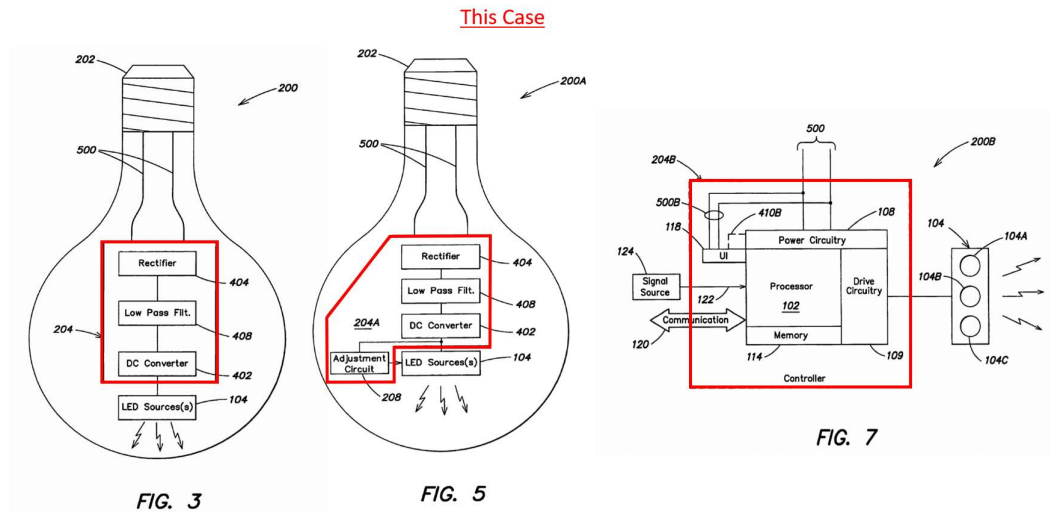
The Federal Circuit and other courts have similarly held that high-level block diagrams can provide appropriate structure for means-plus-function terms. *See, e.g., S3 Inc. v. nVIDIA Corp.*, 259 F.3d 1364 (Fed. Cir. 2001); *Sipco, LLC v. Abb, Inc.*, No. 11-CV-0048, 2012 U.S. Dist. LEXIS 106659 (E.D. Tex. July 30, 2012); *Uniram Tech., Inc. v. Monolithic Sys. Tech., Inc.*, No. C-04-1268, 2006 U.S. Dist. LEXIS 21661, at *41-43 (N.D. Cal. Mar. 30, 2006).



⁶ Satco’s citation to the non-precedential *Bennett* case is inapposite. *See* resp. br. at 33, 36 (citing *Bennett Marine, Inc. v. Lenco Marine, Inc.*, 549 Fed. Appx. 947 (Fed. Cir. 2013)). There, the Federal Circuit held that disclosure of only a specific circuit does not expand structures to general circuits absent evidence that a general class of structures was known. *Bennett*, 549 Fed. Appx. at 954-55. That holding is inapplicable here where the experts agree that a general class of structures for the claimed “controller” was well-known. *See, e.g.,* Ex. 21, 42:9-25, 82:6-17; Ex. 9, ¶¶ 43-64; Ex. L, 68:22-69:8. The specification further discloses Figures 3, 5, and 7 as embodiments of the claimed “controller,” each of which would perform the claimed function.



For example, in *S3*, the Federal Circuit held that the “means . . . for selectively receiving” was “readily implemented from the description in the specification,” *i.e.*, from Figure 2, because the evidence showed that “a selector is of well known electronic structure and performs a common electronic function.” *S3*, 259 F.3d at 1371. Similarly, in *Sipco*, the Court held that the structure corresponding to “means for receiving each of the original data messages and the repeated data messages” was those components of the block diagram shown in Figure 4, reproduced and annotated above. *Sipco*, 2012 U.S. Dist. LEXIS 106659, at *83-84. The court held that “the specification describe[d] in detail the structure of a site controller” where it “describ[ed] a block diagram of a site controller” and “describ[ed] the components of the site controller.” *Id.*; *see also Uniram Tech., Inc.*, 2006 U.S. Dist. LEXIS 21661, at *41-43.



Here, Figures 3, 5, and 7 above provide appropriate structure for the claimed “controller.” Like in *S3*, the evidence shows that a “controller” may be “readily implemented from the description in the specification,” *i.e.*, from Figures 3, 5, and 7 at least and the accompanying description in the specification, where the evidence shows that a “controller” is “of well known electronic structure,” like an LED driver, and “performs a common electronic function.” *See, e.g.*, Ex. 9 at ¶¶ 43-64; Shackle Decl. at ¶ 45; Ex. 21, 42:9-25, 82:6-17.

Moreover, the controllers illustrated in Figures 3, 5, and 7 consist of known structural components that both parties’ experts agree are well-known and would have been “readily implemented from the description in the specification.” *See, e.g., S3*, 259 F.3d at 1371; Ex. 9 at ¶ 58; Shackle Decl. at ¶¶ 113-121; Ex. 21, 38:7-14-17, 39:8-17, 73:10-25, 127:1-24, 87:25-88:7. Further, those components of the controllers illustrated in Figures 3, 5, and 7 are structural themselves and are not limited to the specific arrangements shown in Figures 4, 6 and 8, as Dr. Shackle admits. *See* Shackle Decl. at ¶¶ 113-117; Ex. 21, 59:29-24, 147:10-17, 149:13-25, 155:6-12.

Finally and incredibly, Dr. Shackle *admits* that “power circuitry” as recited in Claims 18

and 21 is not a means-plus-function term because those claims recite a rectifier, low pass filter, and a DC converter. *See* Shackle Decl. at ¶¶ 78-84. That is, Dr. Shackle opines that “power circuitry” is *generally* a functional term, Shackle Decl. at ¶¶ 74-75, but when the claim recites that that power circuitry includes a rectifier, low pass filter, and a DC converter, *without any other details*, “power circuitry” *then* has sufficient structure. But if the mere recitation of a rectifier, a low pass filter, and a DC converter provides sufficient structure for “power circuitry,” then surely where Figures 3 and 5 *show that exact circuitry*, Figures 3 and 5 similarly provide sufficient structure for “controller.” *See* Ex. 21, 90:5-11. For all of the reasons explained above, Figures 3, 5, and 7 illustrate linked structures for the term “controller.”

B. Method claim equivalents of “controller”

The method claim equivalents of “controller” should not be governed by § 112, ¶ 6 for the same reasons described above. Similarly, should the term “controller” be construed as a means-plus-function term, Figures 3, 5, and 7 should be included in the disclosed structure for the reasons discussed above.

C. “adjustment circuit”

“Adjustment circuit” is not a means-plus-function term. Satco acknowledges that “adjustment circuit” refers to a known class of structures. *See* Resp. br. at 35. When unsuccessfully attempting to invalidate the ’399 Patent both before the U.S. Patent and Trademark Office and the U.S. International Trade Commission, Satco’s expert has opined that “adjustment circuits” were “well known and discussed throughout the art.”⁷ Ex. 28, ¶ 102; Ex. 22, ¶¶ 43-44. Consistent with

⁷ Dr. Shackle’s positions in this litigation to the contrary are simply not credible. During his deposition, he contended that a skilled artisan would have never heard of an adjustment circuit Ex. 21, 97:10-16, but in prior sworn testimony he stated unequivocally that “adjustment circuits were well-known and discussed throughout the art.” Ex. 28, ¶ 102. While Dr. Shackle now

his past testimony, he once again agrees with Signify that “adjustment circuits” include circuitry that adjusts power. Ex. 21, 127:1-24; Ex. 22, ¶ 43; Ex. 28, ¶ 102.

Satco cites *MTD Products Inc. v. Iancu*, 933 F.3d 1336 (Fed. Cir. 2019) for the proposition that a term may not be structural where expert testimony shows that the term encompasses a “wide variety of structures.” Resp. br. at 35; *MTD*, 933 at 1339-40. But the expert in *MTD* opined that the term amounted to a “black box” that “does not bring to mind any specific structure” to a POSITA. *MTD*, 933 at 1339-40. Here, the parties agree and the evidence shows that “adjustment circuit” connotes a class of structures. See Resp. br. at 35; Ex. 21, 127:1-24; Ex. 22, ¶ 43; Ex. L at 110:3-11. Because the parties agree that the term “adjustment circuit” connotes structure to a POSITA, the term is not a means-plus-function term subject to § 112, ¶ 6. See *Skky, Inc.*, 859 F.3d at 1019; *Sound View Innovations*, 2017 U.S. Dist. LEXIS 76412, at *11. The Court should construe the term according to its plain and ordinary meaning.

In the alternative, appropriate structure for “adjustment circuit.” Should the Court determine that the term “adjustment circuit” is a means-plus-function term, the Court should grant “adjustment circuit” all of its disclosed structures, including adjustment circuit 208 as illustrated in Figure 5, adjustment circuit 208 shown in the exemplary embodiment that is shown in Figure 6, and all descriptions in the specification, including the modified circuit of Figure 8 as described, and structural equivalents thereof. Ex. 2 at 19:5-9. As with “controller” above, there is no support for Satco’s exclusion of multiple disclosed structures from its proposal. *Micro Chem.*, 194 F.3d at 1258.

D. “power circuitry”

contends that his prior statements may have been “misleading,” Ex. 21, 132:20-133:1, his newly changed opinions cannot be reconciled with his prior testimony and merit no weight.

“Power circuitry” is not a means-plus-function term. Yet again, the parties agree that the term “power circuitry” connotes structure; the dispute is whether that class of structures is “too broad.” *See* Resp. br. at 37. Courts have consistently held that the term “circuitry” connotes structure such that it is not subject to means-plus-function treatment. *See, e.g., Phenix Longhorn, LLC v. Wistron Corp.*, No. 17-cv-00711, 2019 U.S. Dist. LEXIS 103786, at *43 (E.D. Tex. June 21, 2019) (“The Federal Circuit has repeatedly and consistently found that, in the electronic arts, ‘circuit’ or ‘circuitry’ terms connote sufficient structure to avoid means-plus-function claiming.”). The addition of the word “power” before “circuitry” only reinforces that the term connotes structure.

Dr. Shackle admits that “power circuitry” as recited in Claims 18 and 21 is **not** a means-plus-function term because those claims recite a rectifier, low pass filter, and a DC converter. *See* Shackle Decl. at ¶¶ 78-84. Where “power circuitry” provides that same function in all claims that recite the term, Dkt. 94-1, at 33, 72, and the specification explains that the power circuitry may comprise these “well-known types of electrical components,” Ex. 21, 88:10-16, Satco is wrong in asserting that “power circuitry” is a means-plus-function term. The term should be accorded its plain and ordinary meaning, which is “power circuit components within the power processing path of a circuit.” *See* Ex. 9 at ¶¶ 67, 70; *see also* Ex. 21, 87:25-88:7.

In the alternative, appropriate structure for “power circuitry.” If “power circuitry” is found to be a means-plus-function term, the Court should include the power circuitry as illustrated in Figures 3, 5, and 7 as well as the example circuit diagrams shown in Figures 4, 6 and 8. As with “controller” and “adjustment circuit” above, there is no support for Satco’s exclusion of the structures shown in Figures 3, 5, and 7, which are clearly linked to the function of “power circuitry.” *Micro Chem.*, 194 F.3d at 1258. Each of Figures 3, 5, and 7 shows a combination of

known structural components, and the specification links those structures to the claimed function. Moreover, the specification makes clear that the power circuitry disclosed in the example circuit diagrams of Figures 4, 6, and 8 may be modified, consistent with the high-level illustrations of Figures 3, 5, and 7. Ex. 2 at 13:56-58, 19:4-12, 19:13-16. Further, Dr. Shackle agrees that the rectifier, low-pass filter, and DC converter of Figure 5 provide structure for the “power circuitry” of Claim 18. Ex. 21, 90:5-11. Where “power circuitry” provides the same function in all claims that recite the term, Satco’s position that Figure 5 does not provide sufficient structure is nonsensical.

E. “alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage”

Satco asks the Court to disregard the “‘heavy presumption’ that claim terms carry their full ordinary and customary meaning,” *see Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003), and imports into the claim a negative limitation that finds no support in the intrinsic record. *See* Resp. br. at 39; *Nanochem Sols. Inc. v. Global Green Prods., LLC*, No. 10 C 5686, 2013 U.S. Dist. LEXIS 13509, at *5 (N.D. Ill. Jan. 29, 2019) (“To construe the cited claims as containing a negative limitation should not be done without support in the specifications or file history.”) (citing *Santarus, Inc. v. Par Pharm., Inc.*, 694 F.3d 1344, 1351 (Fed. Cir. 2012); *Omega*, 334 F.3d at 1322-23). Rather than provide “a reason,” to exclude the plain scope of the claim, the specification supports that the claims should be entitled to their full scope.

The specification starts with the assumption that the invention covers standard A.C. line voltage and then explains that *it can also accommodate* non-standard A.C. line voltage. *See, e.g.*, Ex. 2 10:30-42. The specification therefore indicates that the invention is intended to cover both standard and non-standard A.C. signals and provides no indication that the invention *cannot* utilize standard A.C. signals. Further, there is nothing in the specification to indicate that the claimed

A.C. dimmer circuit that provides the A.C. signal cannot *output* a standard A.C. line voltage as well. Indeed, a dimmer switch provides the ability to vary the average voltage anywhere from 100% of the A.C. line voltage to less than 25%, and at 100%, the output signal would be the same as the standard A.C. line voltage. *See* Ex. 2 at 13:17-20. Satco's expert, Dr. Shackle, agrees, acknowledging that an A.C. dimmer could output a standard A.C. signal, perhaps with some small amount of noise. *See* Ex. 21, 17:3-12; 140:25-141:3; 143:1-4. Thus, rather than supporting the importation of a negative claim limitation, the specification on the contrary confirms that the claims should be entitled to their full scope to include power sources capable of providing both standard and non-standard A.C. signals.

Satco also argues that the prosecution history supports its construction, citing testimony from the hearing in IPR2015-01294. Resp. br. at 40-41. This testimony, however, was directed at distinguishing prior art because, as the U.S. PTO correctly agreed, the art did not disclose a controller configured to receive and provide power based on two or more A.C. signals other than a standard A.C. line voltage. IPR2015-01294, Paper 45 at 36:19-44:2. Nothing in the testimony suggests that the claimed controller cannot also provide power based on a standard A.C. line voltage. To invoke the concept of prosecution history disclaimer to statements made during IPR proceedings, "any such statements must 'be both clear and unmistakable.'" *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1361 (Fed. Cir. 2017). There is no such disclaimer here.

F. "A.C. Dimmer Circuit" / "(A.C.) dimmer circuit" / "alternating current (A.C.) dimmer circuit"

While Satco initially claims that there is no dispute about the meaning of these terms, (Resp. br. at 41), its arguments make clear that a dispute exists. Satco asserts that certain claims "do not require the signal from the dimmer to be an AC signal" (Resp. br. at 42), which is directly contradictory to Signify's construction which requires that the "A.C. dimmer circuit" provide an

A.C. dimming signal and *not* a D.C. signal. Nothing in the claim language or the evidence suggests that the “power-related signal” from the “A.C. dimmer circuit” could be a D.C. signal or anything other than an AC signal. The specification is clear that an “A.C. dimmer circuit” is a dimmer circuit with an A.C. signal output, explaining that the purpose of the invention is to use A.C. power with LED-based light sources. *See* Ex. 2 at 9:4-16, 9:50-55. Indeed, in another portion of its brief, Satco agrees that the “inventions are intended to allow LED lights to operate based on the A.C. signal transmitted by a conventional TRIAC dimmer.” Resp. br. at 26. Even Satco’s expert agrees with the non-controversial proposition that A.C. dimmer circuits provide A.C. power and not D.C. power. Ex. 21, 16:21-17:2, 137:21-138:3.

IV. THE ’554 PATENT

A. “without monitoring or regulating a first voltage or a first current” and “without using any feedback information relating to the at least one first LED”

For the “without” terms, Satco imports negative limitations into the claims that find no support in the intrinsic record. *See Omega*, 334 F.3d at 1322-23. First, Satco seeks a negative limitation for “without monitoring or regulating a first voltage or a first current” that is only met “if and only if none of the four actions are performed.” Resp. br. at 41-42. But without a clear disclaimer in the intrinsic record, a negative limitation is improper. *See Omega*, 334 F.3d at 1322-23.

Second, Satco injects the terms “directly or indirectly.” But Satco does not dispute that the specification does not use the terms “directly or indirectly” *at all* when discussing the limitations above. Satco says it seeks to “clarif[y]” the claim language, but its only support for doing so is a prior art Figure annotated by Satco. *See* Resp. br. at 44. Satco gives no explanation as to why its annotations to the prior art Figure indicate that the claims of this patent should be limited. Satco’s arguments regarding “directly and indirectly” are unsupported and should be rejected.

B. “converter” terms

The parties agree that the “converter” terms were well-known and are not limited to Satco’s proposed “typical[]” topologies. Resp. br. at 45-46. Satco argues that its “exemplary topologies” “are non-limiting examples meant to assist the jury in understanding a well-known class of devices that is familiar to a POSITA but likely is not familiar to a lay juror.” Resp. br. at 45-46. But Satco’s expert, Dr. Shackle, agrees that the exemplary topologies do not themselves provide any helpful guidance where he admits that the jury would require the assistance of expert testimony to understand those topologies. Ex. 21, 163:8-11. Thus, the Court should decline to construe the “converter” terms, as doing so is unhelpful and runs the risk of improperly suggesting that these converters are limited to particular topologies not required by the claims. *See Takeda Pharm. Co. v. Mylan, Inc.*, No. 12 Civ. 24, 2012 U.S. Dist. LEXIS 148196, at *4-5 (S.D.N.Y. Oct. 11, 2012) (“Claim construction ‘is not an obligatory exercise in redundancy,’ and thus, if the parties have no actual dispute over the ordinary meaning of such a term, the court is not obligated to construe it.”).

V. THE ’604 PATENT

A. “fastening means”

There is no dispute that column 5, lines 18-24 of the ’604 Patent lists structures—including “mechanical fasteners,” “magnetic mounting systems,” and “adhesives”—that are *explicitly called* “fastening means.” Yet the parties disagree on whether those structures are clearly linked to the “fastening means” limitation in Claim 1. In an effort to narrow the limitation and generate noninfringement arguments, Satco responds in the negative. But the intrinsic and extrinsic evidence demonstrate that the required link exists, so Signify’s proposal should be adopted.

As explained earlier, “[w]hile the specification must contain structure linked to claimed means, *this is not a high bar* [T]he corresponding structure of the limitation must be disclosed in the written description in such a manner that one skilled in the art will know and understand

what structure corresponds to the means limitation.” *Biomedino*, 490 F.3d at 950 (emphasis added). Signify’s expert testified that a POSITA would have understood that “screws, bolts rivets or the like, magnetic mounting systems, adhesives for example, pressure sensitive tape, glue or epoxy or the like” correspond to Claim 1’s “fastening means.” Op. br., Ex. 8 at ¶¶ 77-81. Satco maintains that adhesives should not be included. But failing to include “adhesives” (a structure identified in column 5, lines 18-24) would read out dependent Claim 12, which contemplates the use of adhesives as a “fastening means.” Op. br. at 42-43. A POSITA would therefore “know and understand” that the “fastening means” in Claim 1 must include the “fastening means” described in column 5, lines 18-24.

The prosecution history also supports Signify’s proposed construction. Prosecution history can supply the clear link between a “means” term and its corresponding structure(s). *See, e.g., Via Vadis, LLC v. Blizzard Entm’t, Inc.*, 815 F. App’x 39, 45 (Fed. Cir. 2020). During prosecution of the ’604 Patent, the Examiner allowed Claim 1 over prior art reference U.S. Pub. No. 2003/0058650 (“Shih ’650”). Ex. 23. In the Notice of Allowability, the Examiner *explicitly recognized* that an “adhesive” is a structure that corresponds to Claim 1’s “fastening means”:

Shih ’650 discloses including an adhesive 185 which serves as fastening means coupling the substrate 160 to the heat dissipation, but fails to disclose that the fastening means (adhesive 185) is part of the housing 140. (See Figure below).

Ex. 24 at 2 (highlighted). The construction of “fastening means” should encompass the Examiner’s reasons for allowance. *See Nazomi Commc’ns, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1370 (Fed. Cir. 2005).

Satco’s rejoinders are unavailing. First, Satco incorrectly argues that the “fastening means” in column 5, lines 18-24 is a “different fastening means” “used to perform an entirely different function”—namely, “mounting the light-emitting modules to mounting systems such as a track.”

Resp. br. at 15-16. Yet Satco misunderstands the relevant disclosure. The specification states that “[t]he housing element comprises fastening means to secure the various components of the light-emitting module together as well *optionally* providing support to the cable system.” Ex. 6, 7:25-28 (emphasis added). The word “optionally” signals that the “fastening means” described in column 5, lines 18-24 might—or might *not*—support the cable system. *Id.* Satco’s urging that the “fastening means” in column 5, lines 18-24 must “perform an entirely different function” contradicts the specification, which describes the “fastening means” as doing something more.

Second, Satco contends that the “fastening means” described in column 5, lines 18-24 does not achieve the claimed function of “detachably coupling the housing element to the heat dissipating element.” Resp. br. at 16-17. But this argument relies on a deft substitution of the claimed function. Though Satco has *already agreed* that the term’s claimed function is “detachably coupling the housing element to the heat dissipating element” (*see* Resp. br. at 14), Satco and its expert now recast the claimed function as having *additional* requirements: a “re-attachable,” “releasable,” “convenient,” and non-auxiliary connection. Resp. br. at 16-18; Ex. 20, 76:23- 77:1, 80:15-19, 89:11-14, 90:20-23. Satco is simply trying to “raise the bar”: it is importing additional limitations into the claimed function in order to argue that the structures in column 5, lines 18-24 cannot perform that function. The Court should reject this tactic.

As to the term “re-attachable,” Satco’s expert insists that this is a requirement of the claim language “detachably coupling.” Ex. 20, 90:20-23. But “re-attachable” requires *more* than “detachable”: the former implies that *after* being detached, the “fastening means” be used *again* to re-couple the “housing element” to the “heat dissipation element.” It is improper to import a limitation into a claim where the limitation has no basis in the intrinsic record. *See, e.g., WesternGeco*, 889 F.3d at 1323-24.

As to the term “releasable,” Satco violates the doctrine of claim differentiation. “In the most specific sense, ‘claim differentiation’ refers to the presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim.” *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380 (Fed. Cir. 2006). Claim 11 of the ’604 Patent is dependent on Claim 1 and adds the limitation of a “releasable” connection: “the housing element is formed from flexible material for *releasably* connecting to the heat dissipation element.” Ex. 6, Cl. 11. The “fastening means” term is in Claim 1, so the Court should decline to construe the function to *add* the limitation of a “releasable connect[ion].”

As to the terms “convenient” and non-auxiliary, Satco relies on statements regarding the “technical effect” of the claimed invention in European and Canadian family members of the ’604 Patent. But the Court should give these statements little to no weight because they are from foreign prosecution, which has different legal and procedural requirements for obtaining patent protection. *See AIA Eng’g Ltd. v. Magotteaux Int’l S/A*, 657 F.3d 1264, 1279 (Fed. Cir. 2011) (explaining that Federal Circuit precedent “cautions against indiscriminate reliance on the prosecution of corresponding foreign applications in the claim construction analysis”).

If the Court considers these statements—which it should not—then Satco’s effort to import additional limitations should still be rejected. Absent a clear intention to limit a claim, an invention’s advantages should not be imported into the claim’s construction. *See Brookhill-Wilk I, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1301 (Fed. Cir. 2003) (“Advantages described in the body of the specification, if not included in the claims, are not per se limitations to the claimed invention.”). The “technical effect” statements identified by Satco are no more than descriptions of the invention’s advantages, and Satco has identified nothing that demonstrates intent to limit the invention to these advantages. In fact, the record shows the opposite. In the Canadian

prosecution, the applicant used the phrase “e.g.” Resp. br., Ex. D at 3 (“The connection is also convenient, e.g. due to the fact that . . . there is no need of auxiliary fastening means.”). This is exemplary language, so the corresponding description should not be imported into the claim’s construction. *See Silicon Graphics, Inc. v. ATI Techs., Inc.*, 607 F.3d 784, 792 (Fed. Cir. 2010).

VI. THE ’525 PATENT

A. “self-inductance”

It is not disputed that “self-inductance” would have had a plain and ordinary meaning to a POSITA. But that does not resolve the parties’ disagreement. The Federal Circuit has directed that courts must examine the intrinsic record “to determine whether the patentee acted as his own lexicographer of a term that already has an ordinary meaning to a person of skill in the art.” *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1370 (Fed. Cir. 2005). The ’525 Patent’s specification demonstrates that the patentee acted as his own lexicographer to define “self-inductance” as a component that is distinct from the transformer of the first and second series circuit. Op. br. at 44-45. This definition makes sense in the context of the specification, which indicates that the claimed “self-inductance” has a value that is *30 times higher* than the self-inductance of a transformer. *Id.*

During his deposition, Satco’s expert, Dr. Shackle, also acknowledged that the ’525 Patent’s specification uses “self-inductance” in a manner consistent with Signify’s proposal. The ’525 Patent’s specification describes a prior art “switching arrangement” in U.S. 5,682,306 (“the ’306 Patent”). Ex. 4, 1:17-36; Ex. 25 (U.S. 5,682,306). In that “switching arrangement,” the ’525 Patent states that “the self-inductance forms a *first energy storage* element.” Ex. 4, 1:21-22. In this disclosure, Dr. Shackle admitted that the ’525 Patent used the term “self-inductance” to refer to an *inductor*; not a transformer. Ex. 21, 171:1-6, 175:24-176:2.

The '525 Patent's prosecution history also supports Signify's proposed construction. During prosecution, the Examiner rejected Claim 1 as disclosed by the Ortiz patent. Ex. 26 (Applicant's Amendment and Arguments of June 30, 2005) at 8; Ex. 27 (Ortiz). In response, the Applicant argued that Ortiz did not disclose Claim 1's limitations relating to a *transformer*. *Id.* ("Ortiz does not even teach . . . the particular recitation of independent claim 1 of: the inductive winding forms a secondary winding of a transformer . . ."). If the Applicant understood "self-inductance" in Claim 1 to be the inductance of a transformer (as Satco contends), then the Applicant would have argued that because Ortiz failed to disclose a transformer, it *also* failed to disclose "self-inductance." But the Applicant *did not* argue that Ortiz failed to disclose "self-inductance." *See id.* This is because Ortiz disclosed a "resonant inductor 27" and "filter inductor 28," which are "inductive circuit component[s] distinct from the claimed transformer"—*i.e.*, Signify's proposal for "self-inductance." Thus, the Applicant understood that Claim 1's "self-inductance" should be construed consistent with Signify's proposal.

Satco's argues that because Claim 3 uses "self-inductance" to describe the inductance of the transformer's secondary windings, then "self-inductance" in Claim 1 must also describe the inductance of the transformer's primary windings. Resp. br. at 47. But "the same claim term can have different constructions depending upon the context of how the term is used within the claims and specification." *Aventis Pharms., Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1374 (Fed. Cir. 2013). As explained above, the context of the '525 Patent requires that "self-inductance" in Claim 1—the claim *actually* in dispute here—means "an inductive circuit component distinct from the claimed transformer." Moreover, the Court should adopt Signify's proposal even if it does consider other claims. Claim 5 (which, like Claim 3, is not asserted here) requires "a transformer," and Claim 7 (which depends on Claim 5) "*further* comprises a self-inductance." Ex. 4, Cls. 5, 7

(emphasis added). If “self-inductance” in Claim 7 can refer to a transformer (as Satco contends), then Claim 7 would not add anything to Claim 5—effectively reading out Claim 7.

Satco also relies on expert testimony and a dictionary definition to improperly argue that “[a] proper evaluation requires considering all of the self-inductance, rather than arbitrarily excluding the self-inductance of the primary winding per Signify’s construction.” Resp. br. at 48-49 (citing Shackle Decl. at ¶¶ 182-87); *id.* at 46 n.12 (citing Ex. M). But Satco and its expert are substituting their own view of how the invention *should* operate for what the inventors *actually* invented and claimed. This defies the Federal Circuit’s instruction that “extrinsic sources like *dictionaries and expert testimony cannot overcome more persuasive intrinsic evidence.*” *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1328 (Fed. Cir. 2008) (emphasis added). It would be legal error to overlook the intrinsic record and (as Satco requests) credit a dictionary-based definition.

Finally, relying on the testimony of Dr. Shackle, Satco argues that the “L” in Figures 1 and 2 could represent the inductance of a transformer’s primary windings because “[t]his is a common way to represent the leakage inductance of a transformer in a circuit diagram.”⁸ Resp. br. at 48 (citing Shackle Decl. at ¶¶ 182-87). Yet Dr. Shackle’s opinion assumes that Figures 1 and 2 illustrate a transformer as a “lumped-sum equivalent circuit.” *See* Shackle Decl. at ¶ 183; Ex. 21, 178:4-180:1. And Dr. Shackle admitted that assumption was *flawed*. During his deposition, Dr. Shackle acknowledged that Figure 1 either “can’t be a lumped-constant equivalent circuit” or is “a rather poorly drawn lumped-constant equivalent circuit.” *Id.* at 183:5-12; *see also id.* at 182:4-16

⁸ Satco suggests that Signify erred by suggesting that Ls is a “self-inductance” of transformer T. Resp. br. at 48 (citing Op. br. at 45). But the transformer includes both a primary and a secondary winding. *See* Ex. 4, Cl. 1; *see also id.* at Abstract, 1:44-48, 2:49-44. Thus, Ls does represent a “self-inductance” of a transformer. Signify committed no error.

(admitting that Figure 1 “doesn’t look much like a lumped-constant equivalent circuit”). This flawed assumption infects Dr. Shackle’s testimony regarding “leakage inductance,” so the Court should give that testimony no weight.

VII. THE ’929 PATENT

A. “diffuser disposed over the housing”

Due to space constraints, Signify rests on its opening brief.

B. “... a consistent level of light output to the different portions of the diffuser”

Satco alleges this term is indefinite because of the words “consistent” and “different,” but terms of degree are not inherently indefinite. *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014). First, Satco ignores that “consistent” has a well understood and plain and ordinary meaning—*i.e.*, similar or comparable—as recognized by other courts. *See Advanced Neuromodulation Sys., Inc. v. Advanced Bionics Corp.*, No. 4:04-cv-00131-RAS, 2005 U.S. Dist. LEXIS 47694, at *26 (E.D. Tex. Sept. 29, 2005) (construing “consistent with” as “similar to and compatible with”).

Satco’s expert admitted the Asserted Claims of the ’929 Patent relate to Figure 15. Ex. 20, 39:22-25. When describing Figure 15, the ’929 Patent describes at least three mechanisms for providing a consistent level of light output to different portions of the diffuser: (i) a pyramidal element 1510, (ii) curved shapes described by a 2nd order equation, such as a parabola, and/or (iii) a Lambertian surface. Ex. 7, 35:20-36:47.

Satco’s expert admitted that a POSITA would understand that these passages in column 35 refer to uniform light as measured by photometry (*i.e.*, perceived brightness to the human eye) in lumens. Ex. 20 at 129:12-20, 131:25-132:4. Thus, a consistent level of light output refers to a similar or comparable level of light as perceived brightness to the human eye.

Second, this term requires that different portions of the diffuser have consistent levels of light. If any different portions of the diffuser have a consistent level of light, then the term is satisfied.

C. “disposed in an architectural environment”

The '929 Patent discloses that the claimed tile lights can be disposed in numerous architectural environments such as walls, ceilings, doors, windows, or floors. Ex. 7 at abstract, 31:63-65, 32:13-15, 34:60-62, 36:54-57, 46:29-33. The '929 Patent further discloses that the claimed tile lights can “serve as a wall, door, a ceiling, a floor, an elevator wall, or other construction units.” *Id.* at 58:33-35.

Satco attempts to limit Claim 23 to the interior of a building, but an architectural environment is not so limited. While the specification refers to “building interiors (commercial and residential),” (*Id.* at 31:21-22 36:56 46:29-31) the specification also explicitly refers to building exteriors. *Id.* at 36:56-57, 46:29-31. If the applicants intended to limit Claim 23 to building interiors, they would have done so by claiming a “building interior,” which they did not.

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Respectfully submitted,

/s/ Thomas W. Davison

Natalie C. Clayton (4409538)
Stephen Yang (5123492)
Ravi Shah (*admitted pro hac vice*)
ALSTON & BIRD LLP
90 Park Avenue
15th Floor
New York, NY 10016-1387
Telephone: (212) 210-9400
Facsimile: (212) 210-9444
Email: Natalie.Clayton@alston.com
Email: Stephen.Yang@alston.com

Adam D. Swain (*admitted pro hac vice*)
Thomas W. Davison (*admitted pro hac vice*)
Emily M. Grand (*admitted pro hac vice*)

ALSTON & BIRD LLP

950 F. Street, NW

Washington, D.C. 20004-1404

Telephone: (202) 239-3300

Facsimile: (202) 239-3333

Email: Adam.Swain@alston.com

Email: Tom.Davison@alston.com

Email: Emily.Grand@alston.com

***Counsel for Plaintiffs Signify North America
Corporation and Signify Holding B.V.***

CERTIFICATE OF SERVICE

On January 4, 2021, I electronically submitted the foregoing document with the clerk of court for the U.S. District Court, Eastern District of New York, using the electronic case filing system of the court. I hereby certify that I have served all counsel of record electronically or by another manner authorized by Federal Rule of Civil Procedure 5(b)(2).

/s/ Thomas W. Davison
Thomas W. Davison